

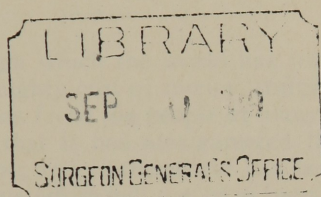
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EDUCATIONAL POSSIBILITIES OF  
THE NATIONAL MEDICAL  
MUSEUM

IN THE STANDARDIZATION OF MEDICAL TRAINING



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# EDUCATIONAL POSSIBILITIES OF THE NATIONAL MEDICAL MUSEUM

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The crisis through which the world has just passed was reached at a mighty cost of money, suffering, sorrow and life. It has freed the people of many nations, it is to be hoped that it has amalgamated the many peoples of our own; and if the world has been made safe, the tremendous effort will not have been made in vain. There will always be wars, but the waging of them will not be undertaken by the more highly civilized nations without just deliberation. The war has produced a mental quickening which has advanced our knowledge of the mechanical and the scientific far beyond that of a like period of peace. Our country is no longer isolated from other countries. Through science the world has become so contracted, as regards transportation, that whereas Columbus spent many weeks sailing from the old world to the new, it now takes but twenty-four hours to travel by air from the old world to the new, and but four and one half days by water.

The medical profession may be justly proud of the record made by organized medicine during the war. The carrying on of this war, above all others, was dependent to an extraordinary degree on the physician. This statement applies to the medical profession as a whole, which is alike the world over, there being little difference in the capabilities of the leading men. In the wars of the past, generals have deplored the losses due to disease, which were always greater than from injury in action and were looked on as a necessary and inevitable accompaniment of war. In this war there

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were more than two deaths from injury and its results to one of disease, and yet the world lauded the strategy developed by commanding officers. There have been but few instances of military strategy and almost no casualties among the higher officers in command. The real strategy of this war has been the control of disease by the men in the medical corps who reduced the loss of man power by preventive medicine, and by treatment controlled diseases that in the past were determining factors in the defeat of armies. The failure of the British in the Mesopotamia campaign was a medical failure due in part to lack of rank and attendant authority vested in the medical officers, and in part to army ethics, which made conferences difficult between officers of dissimilar rank. We need only to recall the yearly loss of 250 to each thousand men in the Crimean War, or the record of typhoid in the Boer and Spanish-American wars to realize the benefits of medical control of typhoid and of typhus fever when they started in Siberia. We must also recall the improved morale incident to the modern treatment and quick healing of wounds, whereby men were repeatedly returned to the ranks, instead of remaining permanently disabled and becoming a charge of their country, as in former warfare. Japan, one of the last countries to accept modern civilization, was the first to realize the importance of caring for the health of her troops; her medical officers were held responsible, and in consequence Japan was able to defeat an apparently stronger nation. The exceedingly low disease record of the Japanese army was reduced more than one half in our training camps through the efficiency of that master of preventive medicine, Surgeon-General Gorgas, under whose direction the most efficient army medical organization was perfected that has ever been developed. The mortality rate of our troops in France was lower than that at home among civilians.

Long before our country became engaged in the struggle, hundreds of our profession, feeling the call of humanity, volunteered their services to France and England and served there faithfully and well, suffering many casualties. Our Reserve Medical Corps in France sustained 442 casualties; thus the percentage of losses of noncombatants equaled that of the infantry and artillery. Forty-six officers were killed in action, 22



died of wounds, 12 of accidents, 101 of disease, 4 were lost at sea, 7 were missing in action, 212 were wounded, and 38 were taken prisoners. For months before our country declared war, the first and best organization in preparation was the medical organization under the Medical Board of the Council of National Defense. These preparations were carried out for the purpose of aiding the Medical Department should war be declared. Practically one third of the active members of our profession, whose age, training and capabilities met the requirements of the Surgeon-General, were commissioned for service. Seventy thousand of the medical men not enrolled in the Medical Corps in active service were members of the Volunteer Medical Service Corps. In this group were included the members of the 5,000 local examining draft boards.

It is deplorable, and a blot in the history of this war, that the work of the American medical profession was not recognized by the general staff and that rank, according to responsibility, was withheld in most instances until the war was nearly or quite over. A comparatively long period of service in Washington enables me positively to state that the same unfairness toward the medical army officer still exists. Our government has maintained, at great expense, special places for the training of its army officers, even for their preliminary education, such as West Point for the Army, and Annapolis for the Navy. Students are given opportunity for service after graduation by continued training, maintaining the highest efficiency possible. The government in the past, however, has been at no expense in the training of the medical officers, but it has a postgraduate school for the purpose of training in the theory and practice of military medicine. No account has been taken of the fact that the men in the Medical Reserve Corps had had an average training of at least twenty years, and that their university course and medical course had cost not less than \$5,000 for each person. In spite of the injustice of rank and the inaccuracies of assignments, the members of the Reserve Medical Corps sacrificed freely and willingly that our troops might receive the best that medical education afforded. The work in hospitals, including general and special practices, should at least qualify

the physician to be placed on a par with the line officer of the army who has had a similar number of years of inactive duty in times of peace. The soldier is rewarded or promoted for risk of life and personal valor; an officer who is given authority to command the destruction of life may have spent but a few months in a training camp, while the medical officer who is responsible for the preservation of life devotes many years to preparation. I believe that the necessity of higher rank is essential only as it represents authority and responsibility, and it is required by the civilian medical officer during his period of service. I feel sure that should military service again be required, those in authority will be compelled to give adequate recognition to the medical officers as a vital point of justice.

One last point and I am through with suggestions for the reorganization of army rules which have been well arranged to give a multitude of official positions in time of peace but are most cumbersome and fruitful of delay in time of war. If there must be a general staff, instead of assistant secretaries over divisions, it is highly important that the Surgeon-General's Office should have a representative in each division as a liaison officer.

Surgeon-General Ireland is a most worthy and capable commanding officer for the medical department; he had under his charge a volunteer service of enlisted men, nurses, sanitary corps, dentists and medical officers numbering 300,000; with the transference of the wounded and diseased, he had from 500,000 to 800,000. It is well to call attention to the small number of superior officers assisting the Surgeon-General as compared with the number maintained for corresponding thousands of able bodied men in the regular army.

The general training, discipline and broad education of the youth who participated in the war should insure a just and sane political management of our country for two generations. It is apparent from the rules of the organization of the veterans of this war that they have banded together for the purpose of giving to our country rather than taking from it. The protection against disease and the care of health during the training for war and during war will be recognized and



demanded by them as their right, and the right of posterity in time of peace in order that in the future 36 per cent. of youth in the third decade of life will not be found incapacitated by disease and its results, should they be called to defend their country. The records of our draft boards, now made public, show a startling lack of interest on the part of our national, state and local authorities in their responsibility fully, and often even partially, to protect the people against preventable diseases and the accidents of industry. It is a poor government that does not realize that the prolonged life, health and happiness of its people are its greatest asset. The sum of money appropriated by the nation to expend for the prevention of diseases in man is, indeed, meager compared with the appropriations for the prevention of diseases in animals, and for the development of agriculture. Congress dare not investigate labor conditions for the purpose of maintaining a rational control of labor hours, and to control the value of labor in proportion to the investment. It is conceded, of course, that the manufacturers must be encouraged, and that small business operations only must be controlled by congressional act.

Because of the high cost and rapid turnover of labor, manufacturers, however, are recognizing as a necessity the protection of the industrial workers. The newer methods of treating injury, as developed by the war, will prove of the utmost advantage in caring for the accidents of industry. But many hundred cases of trachoma, and thousands of cases of hookworm, in fact, all forms of disease that can be prevented, controlled or cured, still exist. The serums which have been used in the prevention of certain diseases, such as typhoid, typhus and tetanus, have now become commercialized, and their widespread use certainly places them beyond the criticism of the ignorant. Colonel Russell of the Regular Medical Corps deserves great credit for being the first to free the army of any nation from typhoid.

The laws of civilization signify progress and efficiency along scientific lines. Such progress and efficiency is due to the initiative of comparatively few persons who serve as a stimulus both to the professional and to the lay public. Public demand is the only true stimulus for tradesmen and professional men

alike. This can be advanced only when the nation adopts the slogan "Educate the public."

The standards of the medical profession have been raised from time to time, and great strides are being made to further the progress, wholly through the efforts of its members. Hospitals are being standardized, surgery is being standardized, and everywhere the subject of sanitation and hygiene, dentistry, school inspection and child welfare work is receiving more attention than ever before. From the lessons learned through the war we may now hope to have government standards of all scientific progress. There is no national control of education to develop Americanism. It has been shown that eight and one half millions of our people of more than 10 years of age are uneducated, and 70,000 of our young soldiers could not read nor write. This is not startling, as we are habituated to ignorance; but to have this secret become known to the world is humiliating to those devoted to foreign missions, and will surely be the basis for the appointment of a cabinet officer of education, who will undoubtedly deal with the medical aspect of health problems of education by instituting another medical board in Washington to overlap the functions of a dozen similar powerless boards. Human life and health have been so cheap that it did not seem necessary to safeguard them until we learned how many of our youth in the third decade were physically incapacitated for army service. Through the psychology of war and by coordination of effort may it not be possible to better many conditions with regard to health problems? We must secure a certain degree of health; state or socialized medicine by which to control its development is inevitable.

The government has dabbled in medical affairs at enormous expense for what has been accomplished. Every cabinet position, and many smaller boards, bureaus and advisory committees in Washington, probably as many as eighteen, deal with certain phases of medicine. Thus under the Treasury Department is the Public Health Service; under the Agricultural Department, pure food and drugs; under the Department of Commerce, health statistics; under the Department of the Interior, the insane not otherwise cared for, amounting to a large number; under the Department of



the Bureau of Labor, the accidents of industry, housing, sanitation and child welfare, all under their various divisions, subboards, and committees, none of which will coordinate or give way. Their duties overlap and the expense is great. England is now establishing a ministry of health with supervision of all the educational problems relating to health, sanitation and preventive medicine. Medicine has been tried and proved to a degree that will enable it to stand comparison with any other effectual work of our government. Why not, therefore, establish a cabinet officer of health, and unite, or at least coordinate with efficiency of management, all of the diverse medical activities?

Undoubtedly great good will come through educational publicity by the development of the National Medical Museum in Washington, an institution which, until recently, has been conducted with an appropriation of but \$5,000 a year. It is true that the officers in charge have accomplished much with this meager sum. They have maintained a record of the progress of medicine of past ages and have accumulated many valuable historical specimens. The accumulations of the present war will make the collection modern, and one of the best in the world. I believe that these medical records of the war will be of the greatest value, not only to the glory of medical accomplishment, but also as a means of interesting and educating the public in scientific matters pertaining to health and disease. The museum now houses the splendid medical library of the Surgeon-General's Office. We can visualize a series of like departments, one to be devoted to the missiles of the present war and the character of wounds produced by them, fully illustrated by plaster casts, wax models and drawings; another department to show all the diseases and injuries of bone, with methods of repair and treatment; another department to represent the diseases and injuries of the respiratory system; another, the nervous system, etc.; each one amplified by animated drawings and moving pictures which will mark an epoch in the teaching of preventive medicine, and especially of surgery. There will be a department to demonstrate all the diseases common to man and animal, also those in which insects are the carriers or the immediate hosts for the diseases of both

man and animal. In this department will be taught the prevalence, dangers and prevention of tuberculosis, glanders, actinomycosis, etc., as familiar types of a large variety of diseases, and showing the disappearance through control of yellow fever and malaria. The dentists will have a department in which to demonstrate the dangers of focal infections as the cause of chronic and recurring diseases, and to show the results of the neglect of teeth, dangerous types of dentistry, and the best recognized methods of treatment. The department for the curious anomalies and freaks of nature, now the sensational feature of the institution, will be shut off from public view and used only for teaching purposes.

It is probable that the recent graduate in medicine is but 30 per cent. efficient. Realizing this fact, some of our advanced universities do not give a degree until after the completion of one year's hospital service.

To raise our standard of medical instruction and organize a trained Medical Reserve Corps, 10 per cent. (approximately 200) of our medical graduates each year should enter the Army Medical Corps for practical instruction for a three year period with lieutenant's pay the same as at West Point. Nine months should be given to military instruction and field service; nine months to public health service, sanitation and hygiene; nine months to graduate work, and a like period to hospital intern service. If this plan could be developed, a wonderful regular Medical and Reserve Corps would be the result.

The Walter Reed Hospital, built and named in honor of that great martyr to medical progress, should be made the most efficient hospital in the country, and one in which standards of medicine should be established. This hospital, for the most part temporarily constructed, has a capacity of 3,000 beds; it should be replaced largely by permanent construction. Millions of dollars have been spent in Washington by Congress and by the district boards for hospital treatment and maintenance; hundreds of thousands of dollars are spent each year. Surgeon-General Ireland is endeavoring to coordinate the hospital work, the medical instruction, and the laboratories of the museum. It is highly important that he should have the support of the medical profession. While it will cost several millions



of dollars to develop such an institution, it will repay many times by the direct return in increased efficiency in the care and protection of our American army, and, through education, in the care and protection of the health of the American people.

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